DOCUMENT RESUME

ED 205 967 CS 206 453

AUTHOR Sahin, Haluk: And Others
TITLE Television News as a Source of Information: What Gets Across and What Doesn't. A Case Study.
PUB DATE Aug 81
NOTE 26p.: Paper presented at the Annual Meeting of the Association for Education in Journalism (64th, East Lansing, MI, August 8-11, 1981).

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Audiences; Comprehension; *Content Analysis; *News Reporting; *Recall (Psychology); *Television Research; Television Viewing
IDENTIFIERS *Audience Response; *Broadcast Journalism

ABSTRACT

Seeking to uncover some of the factors involved in the comprehension of televised news, a study examined the responses of 425 television news viewers to questions about a news story appearing on a national network's evening newscast. The subjects were asked to name the stories they recalled from the newscast. Then the respondents' recall of the stories was prompted by descriptive labels, which referred to stories in the broadcast without suggesting the content of the individual news stories. All the respondents' comments about all the news stories were recorded and analyzed. The central point of each news story as defined by news editors was used to assess viewer's comprehension. Examination of the target story (a meeting between President Carter and West German Chancellor Helmut Schmidt) with an information transmission approach confirmed that what viewers understand and recall from television news cannot be easily predicted from knowledge of story news content. Only one third of the viewers knew the central point of the target story, while almost half of the respondents remembered nothing at all from the story. The types of information recalled by the viewers were also remarkably diverse, often distorted or factually erroneous. Viewer comprehension of the story appeared to be related to various features of its presentation. (RL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)
This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED205967

TELEVISION NEWS AS A SOURCE OF INFORMATION:

WHAT GETS ACROSS AND WHAT DOESN'T

A Case Study

Haluk Şahin
Cleveland State University

Dennis K. Davis
Cleveland State University

John P. Robinson
University of Maryland

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Haluk Şahin
Dennis K. Davis
John P. Robinson

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CS206453

Submitted for presentation to the Radio-TV Division of the Association for Education in Journalism Convention, East Lansing, Michigan, August 1981.

Introduction

Television news research in the United States has been motivated primarily by a sensitivity for political or ideological "bias" rather than a concern for how effectively information is communicated. Researchers seeking of quantifiable evidence of "bias" have concentrated on news production and content characteristics. In examining news "consumption", researchers have focused on the demographic characteristics of news audiences, or the "gratifications" individual audience members reportedly derive from the experience of watching television news. Information learned by the public from television news has attracted only sporadic and superficial attention.

The paucity of information-based approaches in television news research seems surprising. There is growing evidence that many people get most of their information from television news. Most people say television is their primary source of news as well as the one they are most likely to believe (Roper, 1979). Clearly, in American society, television is not just one more information source, but a central public information resource. If so, researchers should be more concerned about what people learn from television news. How much of any newscast do they actually understand? How much and what kinds of information do they gain? Since 1978, we have been involved in a research project designed to answer these questions. We have examined the comprehension and recall of television network news stories and the relationships between story attributes and the level of comprehension (Robinson, et. al., 1980; Sahin, Davis, Robinson, 1981). In this paper, we will focus on learning from one particular news story to provide a close up

view of some of the factors involved in the comprehension of televised news.

The Information Transmission Process

A simple and straightforward way of studying learning from television news is to conceptualize news dissemination as an instance of information transmission. By definition, a news report is an aggregation of bits of information, processed and structured in accordance with certain professional rules and norms, to be sent to a relatively large audience. The senders and receivers of the news messages are linked together by a channel that makes transmission possible. But, transmission alone does not settle the question of information transfer. The way in which people recall and understand information in messages cannot simply be inferred from the informational content of the sent message. How much correspondence is there between the two? What do they have in common, and how do they diverge from each other? Only by comparing the information contained in news items with what viewers remember about those items can we expect to bridge the two in order to study television as a source (and resource) of information. Providing a model for such comparative analyses is the main goal of this case study.

Limitations and Advantages of our Approach

Undoubtedly, no analysis of a single story can provide definitive conclusions about how story attributes are related to audience reports of it. This case study is intended to stimulate similar research which

might eventually be able to create such conclusions. We hope to perform several similar case studies, examining several different types of news stories and how audience members report their understanding of them.

We are also aware of the limitations of using a rather narrowly defined information transmission approach to guide our analysis. The information transmission approach is ultimately based upon simplistic, mechanistic assumptions about the way in which communication takes place. These assumptions have been common in American communication research for more than three decades and are now being questioned (Fisher, 1978). Yet, this approach offers certain advantages in studying information gain from news reports. Beyond its heuristic value, it is also quite consistent with the structural features of mass media news flow in the United States. By and large, the mass media serve as vehicles of a one-way flow of information from limited sources to dispersed and heterogeneous audiences. The media, as interposed technological instruments, link, but at the same time, separate senders and receivers. The opportunity for audience feedback is minimal and often confined to non-media channels (letters, telephone calls, etc.). In short, a great majority of news receivers have no direct influence or control over the quantity, quality, or selection of information they rely upon for their knowledge of the community, nation, and the world.

Our analysis of the news stories as packages of information does not mean that the story content is reducible to nothing more than bits of

information. Such a presupposition would perhaps be quite consistent with the dominant notions of journalistic objectivity whereby "hard facts" are presumably "supplied to the public through a neutral medium" (The Glasgow University Media Group, 1980, p. 157). Untenability of this kind of "naive empiricism" (Tuchman, 1978, p. 211) has been adequately debunked by careful studies of the newsmaking process (Tuchman, 1978, Gans, 1979).

The following case study represents an attempt to assess which elements of a specific news story were most noticed and used by news viewers as their means of understanding this story. We have discussed the journalistic conventions which led to the creation of these story elements. Our case study necessarily calls into question those conventions and related story elements which impeded or reduced understanding of this story. However, such findings are quite tentative.

Method and Background of the Case Study

The news story examined in this case study was broadcast in the ABC World News Tonight in the evening of June 6, 1979. Two of the authors were in the ABC Newsroom that day and talked to the news editors about the reasons behind using this story, along with other stories in the newscast. The responses of the viewers were collected through interviews conducted in nine cities that day within three hours of the broadcast. The procedures used in the general study have been described elsewhere in greater detail. (Robinson, et.al., 1980)

Our research design was developed and tested by Professor John P. Robinson in 1978 while working with researchers at the BBC. Robinson used nationally representative cross-sections of British adults to find out how a number of stories broadcast over the period of a week were comprehended by the audience. A similar technique was used by us to study the comprehension of network television news in the United States. On three consecutive nights (one night for each network) in June of 1979, interviews were conducted with randomly selected news viewers in 9 cities, immediately after the newscasts. A total of 425 interviews were completed.

The heart of the questionnaire consisted of questions about the news stories in that night's newscast. Each respondent was first asked to name the stories he/she recalled from the newscast. Then, the respondents' recall of the stories was prompted by means of descriptive

labels referring to each item in the broadcast without giving its content away, e.g.,"Nicaragua","Airline Passengers", and in the case of the story under examination in this case study, "German Leader". The respondents were asked if they remembered anything about each story, and if they did, they were probed ("What else do you remember?") until they said they remembered nothing more. Their responses were written down verbatim by the interviewers. It is these open ended responses that constitute the body of audience data used in this analysis.

The central point of each news story as defined for us by news editors was used to assess comprehension. (see Sahin, et. al., 1981). Each central point served as a kind of midpoint on a scale. Each respondent's recalled information was rated by us on the basis of the presence or absence of the "Central point" and additional details. In this case study, we also looked at the recalled information from qualitative viewpoints, examining those elements of the transmitted message that were not recalled, or recalled partially or erroneously, confused with elements in the newscast, filled in by the audience somewhat arbitrarily. By presenting examples of various types of recalled information below, we hope to preserve some of the color and richness of the data obtained in natural settings.

The News Story

The news story examined concerned West German Chancellor Helmut Schmidt's meeting with President Jimmy Carter at the White House. (See the full script of the story in the Appendix). In the study, this story was identified by the descriptive label "German leader". We were told

by the ABC news editors that the central point of the story - the element that made it newsworthy and should be grasped by the audience - was the fact that Schmidt had "met with Carter". (Table I)

This particular story was selected for the case study for a variety of reasons: it appeared to be a fairly typical network story; it was of average length, lasting 100 seconds; it contained both foreign and domestic elements; it came in the middle of the newscast beginning at 10:20 into the newscast and ending at the 12:00 minutes. Furthermore, it was not one of the continuing, major stories that dominated the news. The German Leader story was a discrete item, in the news just for one day, and given little or no coverage by other media, thereby minimizing the risk of information contamination from other media sources. It had no emotional or sensational attributes. It was presented by means of both visual content and verbal narration.

The German Leader story followed a brief item on President Carter's meeting with congressional leaders to discuss energy problems. ABC news editors told us that the "Energy" story was not an important piece in itself and was included in the newscast essentially as a transitional device from a story on Nicaragua to the German Leader story. No visual material accompanied the "Energy" story other than an inset picture of oil wells to symbolize story content. These factors may account for why it was one of the most poorly comprehended and recalled stories in the newscast (See Table II and Figure I).

TABLE I

The order, labels, central points and duration of stories in the ABC newscast, June 6, 1979

Order in the Newscast	Story Label Bullet	Main Point	Air Time	Cumulative Time
1	DC 10 Decision	"were grounded"	:20	:40
2	DC 10 Problems	"cracks"	1:45	2:25
3	FAA	"was not remiss"	1:15	3:40
4	Airline Passengers	"confused, stranded"	1:50	5:30
5	Overseas Flights	"confusion"	1:25	6:55
	STOCKS & COMMERCIAL #1		1:10	8:05
6	Nicaragua	"state of seige"	1:50	9:55
7	Energy	"cooperation with Congress"	:25	10:20
8	German Leader	"met with Carter"	1:40	12:00
9	KKK	"arrested man not connected"	:20	12:20
10	West Point	"last all male graduation"	:20	12:40
	COMMERCIALS #2 & 3		2:00	14:50
	Transition		:25	15:15
11	Pope's Day	"getting weary"	1:45	17:20
12	Jews in Poland	"not too many left"	2:00	19:20
	COMMERCIALS #4 & 5 & Transition		2:10	21:30
13	Salt	"Baker says serious loose ends"	:30	22:00
14	Barbara Walters	"miscl."	2:40	24:40
15	Opera	"incredible sight in N. Korea"	2:20	27:00
	COMMERCIAL #6		1:00	28:00
16	Actor	"J. Haley died"	:25	28:25

The energy story concluded by pointing out that the Congress had killed many of Carter's previous proposals. This was followed by the introduction of the German Leader story: "The President also met today with West Germany's Chancellor Helmut Schmidt with whom he has also had some disagreement". (Our emphasis) Thus the story was linked to the previous story on three points: it was (also) a conflict story concerning Carter's disagreements; it was (also) the story of a meeting involving the President, an event in the daily routine of the Chief executive of the country that is a regular feature of nightly newscasts; and finally it was (also) an energy story. This introduction prepared the mental set in which the German Leader story was to be understood, and was in fact understood by many viewers, as we shall see shortly.

The core of the story, i.e., Carter meeting with Schmidt, was presented in accordance with the conventions of what might be termed the "visiting dignitary" genre. Examples of this genre are found in network newscasts regularly. It is quite formalized in terms of the sequence of shots and verbal descriptions although its length varies depending on the perceived significance of the meeting and other considerations. We often see the dignitaries walking on the White House lawn side by side, shaking hands and smiling to each other, moving up to the microphones to make a brief statement about their talks in diplomatic jargon describing it as "friendly, frank, productive,", etc.

The German Leader story was introduced by the anchorperson Frank Reynolds from the ABC news desk in Washington, D.C. Behind him were inset

photos of Schmidt and Carter, side by side but looking away from each other. The White House correspondent Sam Donaldson's backgrounder began in the symbolic setting of all White House reports with the portico of the presidential residence at the background. With Donaldson relegated to voice over, we then saw Carter and Schmidt walking side by side, smiling and talking to each other - obviously for the press and cameras. The picture was then cut to Schmidt's brief speech with many microphones in front of him, thanking "Jimmy" for his hospitality and friendliness. The story was concluded with Donaldson's standupper again with the familiar symbols of the White House at the background and was followed by a switch to the anchor desk in Chicago.

This segmentalized step by step format of news presentation (The anchor person ⟶ correspondent on location ⟶ scenes from the "event" on location ⟶ correspondent ⟶ anchor desk) though quite predictable, permits a great deal of mobility and flexibility in presenting on location stories. It allows for smooth spatial and temporal transitions, breaks the monotony of the presentation and quickens the pace of the newscast, and routinizes the coverage of complex events. By presenting documentary evidence from the scene, while at the same time allowing room for background information and interpretation, helps construct a tightly woven net of facticity (Tuchman 1979). By breaking information into smaller units, it also helps the packaging of information. It also provides, as all genres do, the viewer with cues as to what is happening and is likely

to happen. For the initiated television news viewer, a glimpse at the screen suffices to signal that another important guest has paid a call to the President.

Content Structure

The information contained in the news story can be catalogued either by listing informational assertions one by one or by arranging them in terms of content structure. Since not all pieces of information carry equal weight in the story, the second approach is more appropriate. Findahl and Hoijer point out that the concept of "content structure" is somewhat different from the more widely employed concept of "narrative structure." (1981) In the case of the narrative structure, the focus is on the rules of story-telling. Content structure, on the other hand, pertains to the way informational elements within the news story are related to one another in terms of causality, temporal sequence, association, contiguity, etc. This approach enables us to break the story down to its informational constituent elements while at the same time, more holistically, enabling us to see the relationship of the constituent elements - i.e., its structure.

The German Leader story has a rather simple, chronological structure:

1) The antecedents of the event that is featured in the story, i.e., that Carter and Schmidt had their disagreements, and that Schmidt is in the U.S. on a private visit, also a French complaint about U.S. oil policies.

2) The core of the story incorporating the four W's (Who, What, Where, When) what we might call "the event", i.e., that Schmidt and Carter met at the White House today.

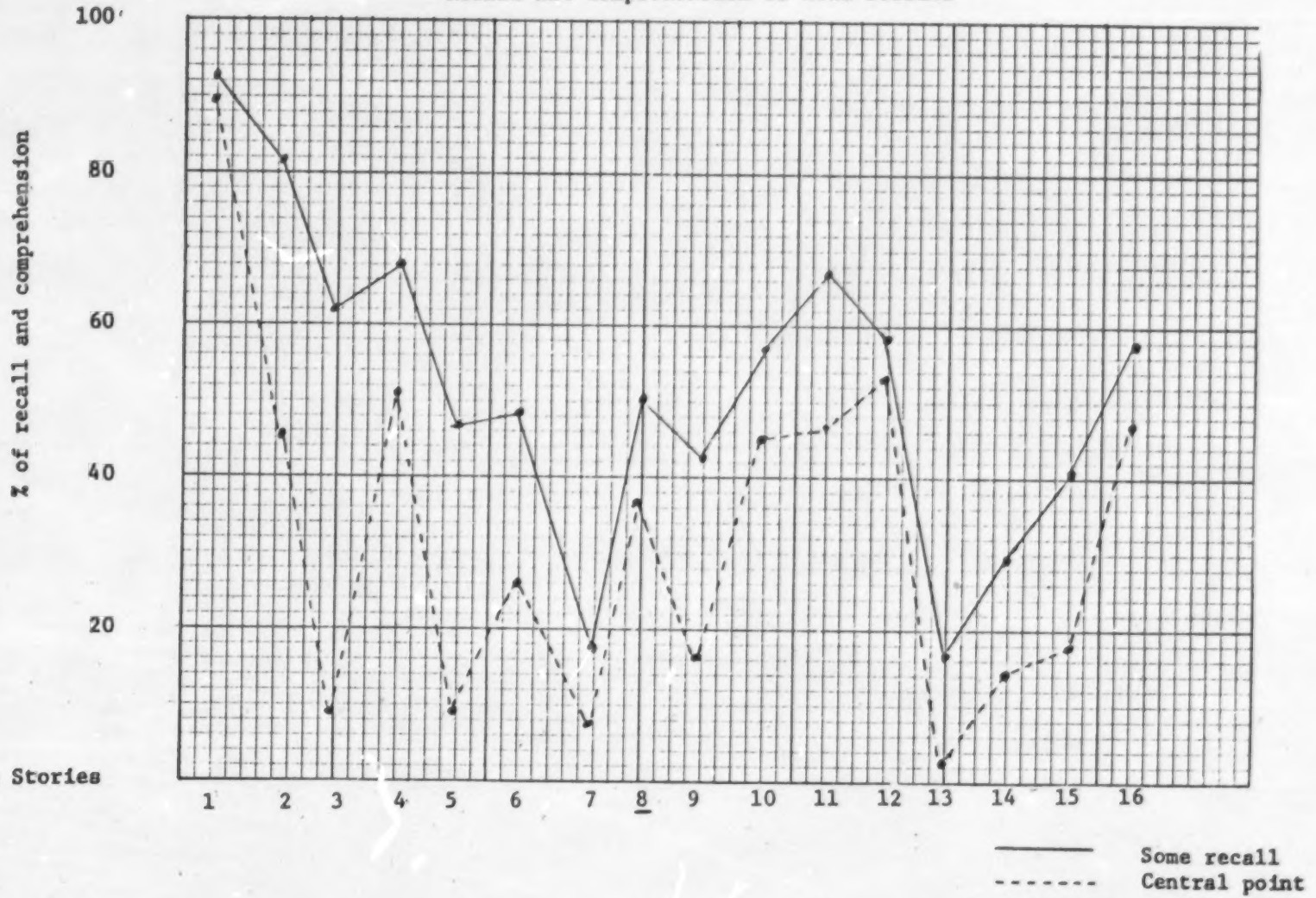
TABLE II

Comprehension levels of the news stories, ABC news, June 6, 1979

Order in the Newscast	Story Label Bullet	Heard the story %	Recalls %	Central point + %
1	DC 10 Decision	96.7	93.4	89.4
2	DC 10 Problems	90.1	81.6	44.1
3	FAA	73.0	62.5	9.2
4	Airline Passengers	76.3	68.4	51.7
5	Overseas Flights	63.1	46.0	9.2
	STOCKS & COMMERCIAL #1	--	--	--
6	Nicaragua	50.6	48.0	26.3
7	Energy	36.2	17.1	7.9
8	German Leader	55.3	50.7	36.2
9	KKK	50.0	42.8	17.8
10	West Point	58.9	57.6	43.7
	COMMERCIALS #2 & 3	--	--	--
	Transition	--	--	--
11	Pope's Day	78.3	66.5	44.1
12	Jews in Poland	63.6	58.3	53.0
	COMMERCIALS #4 & 5 & Transition	--	--	--
13	Salt	35.8	16.7	3.3
14	Barbara Walters	42.4	9.1	13.2
15	Opera	40.8	10.1	17.1
	COMMERCIAL #6	--	--	--
16	Actor	60.0	57.9	45.4

FIGURE I

Recall and Comprehension of News Stories



3) The consequences of the event, i.e., how this meeting might affect future developments such as the two upcoming summits. (See Diagram 1)

Not all television news stories follow such a neat structure. Very few provide the historical context of the event as in this story, and even fewer relate it to future developments. The same story was covered by NBC and was comprised of the core elements only, noting simply that the meeting had taken place. CBS chose not to cover the story at all.

As Diagram 1 indicates, most informational elements in the story fit the structure quite well. There is one exception however: The point made by S. Donaldson in his standupper about French complaint concerning American oil policies. This antecedental element appears out of context and incongruent, having ramifications for its comprehensibility.

Comprehension of the Story

Table II and Figure I make it clear that the "German leader" story was not an unqualified success in terms of audience comprehension. Although 55.3% of the respondents (N=152) said they had heard something about the story, 50.7% could actually recall anything from it, while only 36.2% had actually grasped the central point intended by the news professionals (Schmidt met with Carter). This means 26% of those who could remember something from the story had missed the central point. Among those who did pinpoint the central point 43%,18%,9% could remember one, two, or three additional elements, respectively.

Diagram 1

The Content Structure of the German Leader Story

Antecedents	The Event	Consequences
Carter and Schmidt did not like each other because Schmidt supported Ford.	Who - Schmidt & Carter	Carter & Schmidt like each other better.
	What - met, discussed energy & economic policies.	Relations will improve.
Schmidt in the U.S. on a private visit	When - today for 2 hrs.	
	Where - in Washington at the White House	U.S.-USSR Summit
French complained about U.S. oil, policies	How - frank, friendly serious	Tokyo Summit

The first striking observation about the comprehension and recall of this story is the range of variation in the amount of information recalled, all the way from very sketchy and hazy bits of de-contextualized information, to remarkably detailed comprehensive accounts. For instance, one respondent said he had seen him (Schmidt) "talking on TV," while the only thing another could remember was that he was "delivering the address of graduating class at Yale (sic) University." Yet, at the other end of the spectrum, one respondent said:

"The West German leader backed President Ford, so never saw eye to eye to Carter. Was here for commencement speech at Harvard. Carter and he discussed energy policy."

Another respondent said:

"Schmidt is here meeting with Carter. He and Carter didn't get along too well for quite a while because Schmidt backed Ford in the '78 (sic) Presidential Campaign. Schmidt is here to give a commencement address at Harvard."

As far as the content structure, it appears that much of the recalled information pertained to the event rather than its antecedents or consequences. The respondents' recollection of the German leader story was heavily dominated by the four W's of the event, with considerably less emphasis on the "Why" and the "How". It could be argued that this is because the recollection of the event is the basis upon which all the other elements are built. Without it, none of the other elements has any meaning. It could also be argued that this part is

more memorable because of the documentary evidence accompanying it.

Another reason could be that American television news viewers are conditioned by the reporting conventions of American journalism and therefore tend to tune in to the lead information at the expense of other elements.

Two major antecedental elements (Carter and Schmidt were not on friendly terms, Schmidt is on a private visit) were mentioned by almost one-third of those who did remember something from the story. The other antecedent element about the French complaint, on the other hand, did not register at all: not a single one of the 152 respondents mentioned it directly or indirectly. It is quite obvious that this piece of antecedent information presented toward the end of the story was out of place and superflous: the reference to the French complaint assumed too much prior knowledge, was inserted into a segment of the story that already contained too much information including two rather confusing references to upcoming summits (one, U.S. - USSR in Vienna, the other major industrial nations in Tokyo). It obviously added little to the story from the audience's point of view. Furthermore, the correspondant noted that it was not found "serious" enough for discussion by the two leaders. It could have been deleted from the story without any loss to the audience.

The consequences of the Carter-Schmidt meeting were recalled even less than the antecedent elements. Only 10% of those who provided information from the story mentioned the future ramifications of the event. (Cooperation on the eve of the two summits, better relations).

The information about the two summits was presented in rapid fire fashion, presupposing substantial amounts of prior knowledge. The consequence that did gain attention was that Carter and Schmidt were going to be friends. This is a clear cut example of personalization of historical events and is related to the news angle in which the story was presented.

Story Angle

ABC's story about the Schmidt-Carter meeting was presented from the conflict/cooperation angle. Schmidt's unofficial visit to the White House was interpreted as an act of burying the hatchet - the transformation of an old antipathy into a blossoming friendship. This added elements of human interest to what was otherwise a routine diplomatic event. The two heads of state thus were made into two persons resolving a personal quarrel. While the central point of the story was that the two met, the theme of the story was the blossoming of the friendship. This was not obvious from the event itself, but resulted from the angle imposed by the ABC journalists. NBC, in covering the same occurrence, made no mention of the previous disagreements between the two heads of state. For them, it was primarily a ceremonial occasion.

ABC's angle was adopted by many ABC viewers in their account of what had taken place. It was perceived as a personal story of two individuals making up and becoming friends:

"Him and Carter are getting along pretty good. I forgot what they were doing or saying."

"He's here - kind of kissed and made up with Carter."

"Schmidt never got along with Carter. But it shows when Schmidt visited here in Washington, they get along. It showed that they had nice talks and that they're going to try to get along."

Such personalized treatment of international stories is not rare. This adds a "human" touch to stories, making them more interesting as well as more manageable. Conflicts and contradictions between nations are thus transformed into stories of personal conflicts. Such latent informational elements constitute the meta-discourse of the news story as an "absent narrative" implying a particular understanding of history and diplomacy. Personal likes and dislikes of the leaders as individuals are presented as the implicit motor of history. This approach may also explain the inclusion of the element about the French complaint regarding U.S. oil policies at the expense of Europe. Schmidt and Giscard are both Europeans. They have in the past been very close friends. Now Schmidt is becoming friends with Carter. Can Schmidt and Giscard still remain friends? (Tune in tomorrow at the same time!)

Visual Information

In most genre stories with their conventions and rules of inclusive and exclusive elements, pictures do not add much to the verbal information. The pictures are often stock shots, predetermined down to the camera angles. (Tuchman, 1979; Glasgow Univ., 1980). Yet, they serve other important functions in the construction of the web of facticity. They provide documentary proof that what is said to have happened has in fact

happened. They are often used to support and supplement what is being said in the sound track, although there are occasions when the two are not congruent. In the case of the German leader story, the pictures were very supportive to the theme of the story that the two leaders were becoming friends. The references to the visual content by the respondents were few and often pertained to the element of friendship. A few examples:

"Pictured him with Carter."

"Was talking."

"Schmidt was talking to the President. They were saying goodbye to each other."

"They posed for a lot of pictures."

Errors in Comprehension

Quite a few responses suffered from some kind of error and distortion in comprehension, i.e., deviations from the factual information in the text. Almost 25% of the responses contained one or more such errors. Some were quite insignificant such as Yale instead of Harvard, or whether the commencement address had been delivered or was going to be delivered. In one instance, Willie Brandt was cited as the German leader. These are results of confusing bits of factual information. Another type of error is what we (Robinson, et. al., 1980) called melt-downs combining elements of different stories into the same account. We have pointed out that such melt downs tend to occur more frequently when two or more similar stories are lumped together. Other

types of errors indicate that the story has been misunderstood:

"He was friendly with Carter and Ford."

"He had some remarks about the oil shortage. OPEC and oil companies are creating a false crisis."

"He told President Carter to stop wasting all the oil because it is going to affect Europe. They'll see what is happening and they will do the same thing."

Conclusions

Our close examination of the "German Leader" story using an information transmission approach confirms that what people understand and recall from television news cannot be easily predicted from knowledge of story content. From the point of view of a television journalist, comprehension levels may appear to be disappointingly low because many significant story elements are not recalled or well understood. Also, comprehension levels vary greatly from one individual to another. Only one-third of the viewers knew the central point of the German leader story, while almost half of the respondents remembered nothing at all from the story. The types of information recalled by viewers was also remarkably diverse. Often, it was distorted or factually erroneous.

We have seen how comprehension appears to be related to various features of this news story, especially its structure. Such findings raise more questions than they can answer. News researchers and news professionals should share an interest in seeking answers to these

questions. The differences in comprehension which we have identified need to be explained more completely and more definitively in terms of audience characteristics, the viewing situation, and attributes of news stories. Story attributes in turn need to be explained in terms of the institutional context in which news is produced and disseminated, the professional ideologies of news producers and the interests and needs of news viewers. If such findings can be created, they could guide formulation of new production policies for television journalists which should lead to improved understanding of news content. They could also be used as a basis for educating people to use television more effectively as a medium for news.

REFERENCES

FINDAHL, O. and B. HOIJER (1981) "Studying Media Content with Reference to Human Comprehension" to appear in K.E. Rosengren, Scandinavian Studies in Content Analysis. London: Sage.

FISHER, B.A. (1978) Perspectives on Human Communication. New York: Macmillan Publishing Co.

GANS,H.J. (1979) Deciding What's News. New York: Pantheon.

GLASGOW UNIVERSITY MEDIA GROUP (1980) Bad News Vol. 2. London: Routledge and Kegan Paul.

ROBINSON, J.P., D.K.DAVIS, H. SAHIN and T. O'TOOLE (1980) "Comprehension of Television News: How Alert is the Audience?" Paper presented at the Association for Education in Journalism Convention, Boston.

ROPER, B.W. (1979) Public Perceptions of Television and Other Mass Media: A Twenty-Year Review: 1959-1978. New York: Television Information Office.

SAHIN, H., D.K. DAVIS and J.P. ROBINSON (1981) "Comprehending Television News," The Irish Broadcasting Review (Summer)

TUCHMAN, G. (1978) Making News. New York: The Free Press.